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Influence of Moi Teaching and Referral Hospital Health Outreach Programme on Maternal Child Health in Nandi Central Sub-County

Joseph Kiplagat Rotich[a]*, Yona Sakaja Mang'usho[b]

[a]*Post graduate student University of Nairobi, Box 594,30100, Kenya*
[b]*Lecturer University of Nairobi, Box 30197, Nairobi, 10100, Kenya*
[a]*Email: rotichjoseph@gmail.com*
[b]*Email: sakaya05@yahoo.com*

Abstract

Over the years maternal child health has become a problem in sub Saharan Africa. This problem has triggered outreach programmes and foundations to address the problems relating to maternal child health. This study examined the influence of outreach programmes on maternal child health from the context of MTRH. The objective of the study includes; establish how preventive services influence maternal child health in MTRH Outreach Programme in Nandi Central Sub-county. The study adopted health belief model as its theoretical framework. The research designed used was a descriptive survey. The target population for the study involved 290 Mothers and 5 MTRH officers in charge of health outreach programmes. The sample size for the study involved 165 Mothers and 5 MTRH officers. The MTRH officers were selected using purposive sampling method while Mothers were selected using stratified random sampling method. The researcher utilised questionnaires and interview as data collection instruments. The instruments were validated and tested for reliability before they were administered to the field. Data collected was analysed using descriptive; frequencies, percentages, means and standard deviation and inferential statistics; correlations and regression. The statistical package for social sciences was used to code and enter data. The research showed that health education, referrals, distribution of Insecticide Treated Nets and Nutrition Supplements, child vaccination influence maternal child health in MTRH Outreach Programme in Nandi Central Sub-county.

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* Corresponding author.

Research findings shows that training on immunisation was regularly provided to 71.2% of mothers in the study area, also the main referral programmes that were always provided included; attending pre-natal and antenatal services (76.5%) and educating women on the importance of delivering in health facilities (70.6%), there existed inadequate provision of resources to women on maternal health improvement in the study area and the preventive services regularly provided by included; immunisation services, PMTCT services, advice on maternal emergencies and universal access family planning. The study recommends that there is need for MTRH to consider training women on child nutrition as it was found to be lowly provided, the study suggests that MTRH outreach programme to consider providing more resources and there is need for emergency preparedness and complication readiness.

Keywords: outreach programme; maternal child health.

1. Introduction

Health is a central issue in most developing countries. Better health makes an important contribution towards economic progress, as healthy people live longer, are more productive, and save more (OECD, 2005). Maternal child health is a very important aspect in the contemporary society. Among the millennium development goals, health-related ones figure prominently, with maternal health and health of newborns among the most significant challenges. Maternal health is health of women during pregnancy, childbirth, and in the postpartum period and has a large impact on whether a child survives and thrives. When a mother dies, her children are three to ten times as likely to die as well [1].

Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth, 99% of all maternal deaths occur in developing countries and they are largely preventable [2]. The maternal mortality ratio in developing countries is 240 per 100,000 births versus 16 per 100,000 in developed countries. There are large disparities between and within countries, with a few countries having extremely high maternal mortality ratios of 1,000 or more per 100,000 live births; more than half of all maternal deaths occur in sub-Saharan Africa and almost one third occur in South Asia [2]. The WHO identifies poverty, limited access to public services, cultural practices and lack of information as the main causes or sources of variation in maternal mortality ratios.

Globally, in the year 2008, there were an estimated 358, 000 maternal deaths and of this, the developing world accounted for (355,000) or 99% [3]. These figures have financial implications for the health sector of affected countries. On the one hand, high income countries with high standards of living spend an average of 7.0% of Gross Domestic Product (GDP) on health and on the other hand, low income countries, with low standards of living, spend an average of only 4.2% on the health sector [4]. Apparently, approximately one half of the global population lives in rural areas, but these areas are served by less than a third of the total nursing workforce and by less than a quarter of the total physician workforce [5].

Kenya is one of the countries that suffered 65% of maternal deaths in 2008. It accounted for 7,900 (2.2%) of the global maternal deaths [6]. According to the 2008-09 Kenya Demographic and Health Survey (KDHS) maternal

mortality in Kenya remains high at 7.9% as only 44% of births are managed by health professionals and 43% are delivered in health facilities. These statistics clearly show that over half (56%) of deliveries are done by non-professionals and more than half (57%) of deliveries are done outside healthcare facilities. Between the periods 2003 – 2008/09, there was a rise in maternal mortality rates in Kenya from 0.6% to 0.8%, indicating an increase of 0.2% [7].

There have been efforts to ensure that everyone in need is able to receive good quality health services without undue financial hardship has been growing across the globe [8]. Major constraints that prevent the utilization of maternal health services from the supply side comprise shortage of skilled midwives and emergency obstetric care, weak referral system at health centre levels, inadequate availability of medical equipment, and under financing [9,10]. From the demand side, maternal education, cultural norms and societal emotional support bestowed to mothers, distance to functioning health centers and high cost were found to have significant impact on women's utilization of health care services [9,10].

Many organizations have been keen to develop strategies to mitigate the effects of these constraints. The study will focus on one of the interventions; the health outreach services. Health outreach services are elsewhere known as health extension services. Funding shortages, lack of health care professionals, lack of access to education, economic status, availability of clean water, sanitation and other complex factors (for instance Maternal Newborn and Child health (MNCH) is highly associated and affected by the status of women and children especially girls in a given community) affect the health of mothers and children [11]. About 50% of the world maternal and child death is reported from Sub-Saharan Africa countries (WHO, 2006).

Health outreach program is a package of basic and essential promote, preventive and selected high impact curative health services targeting households. Based on the concept it is designed to improve the health status of families, with their full participation, using local technologies and the community's skill and wisdom [12]. Health outreach workers are an instrumental group of health workers who provide health care services [13]. The workers play an important role in improving healthcare [14;15].

The health outreach workers extend services to hard-to-reach groups and areas, delivering health interventions right in their communities, which tends to be more equitable than services delivered at health facilities [16]. Studies have shown that the provision of health care services at community level through community volunteers and workers with substantial involvement of the community has reduced morbidity and mortality due to diseases of public health concern [17].

Apparently, approximately one half of the global population lives in rural areas, but these areas are served by less than a third of the total nursing workforce and by less than a quarter of the total physician [5]. A study carried out in Ethiopia shows that the coverage of maternity care services is very low and that utilization of maternal health care services is lowest in rural areas [9]. More critical for this study, women's utilization of maternal health care facilities is an important health issue with regard to the wellbeing and survival of both the mother and the child during pregnancy, child birth and postpartum period and has implications on the maternal and child mortality rates in human society [18;2].

Reference [19] indicated that while low income countries have limited resources for training healthcare professionals, the migration of those who are trained to conventional international standards has made dependence on such cadres increasingly precarious. According to [20] low income countries are therefore increasingly looking to new 'mid-level cadres' (health workers who work 'above' the level of responsibility usually afforded health workers with similar training in higher income countries) to provide healthcare. As a result nations have designed health policies to improve the health of the people.

In Cambodia, volunteer support for health outreach services was a major contributing factor to increased health coverage. Two health outreach officers were deployed per village and helped raise awareness and understanding about health needs and educated and mobilized communities. Their role was seen as critical for integrated immunization outreach, particularly when messages for several interventions were delivered simultaneously [21].

Health outreach programmes are faced by a funding predicament. Lack of regular or adequate funding is a commonly cited reason for failure to implement outreach activities. A cost and financing assessment for Ethiopia's National Immunization Program [22] found that operational costs (primarily transport and per diem payments) for outreach were consistently underfunded or not funded at all. As an example of efficient and effective use of health sector resources, the project cited in the study encouraged pooling of transport resources from donor funded vertical health programs (reproductive health, integrated management of childhood illness, malaria and tuberculosis control). Examples of sharing outreach resources and logistics can also be found in Vietnam, where the better-funded malaria control programs have' hosted immunization, vitamin A distribution, and de-worming outreach sessions [23].

In Malawi [24] did a descriptive study on patients' satisfaction with reproductive health outreach services. The majority of women (97.3%) were satisfied with the care they received from admission through labour and delivery and the immediate postpartum period. Most women cited doctors' and nurses' reviews (65%) as what they liked most about the care they received during their stay in the unit. Most women expected to receive efficient and definitive care. The women's knowledge on patient's rights was extremely low (16%) and equally very few women were offered an opportunity to give an opinion regarding their care by the doctors and nurses in the maternity unit (Irish Society for Quality & Safety in Health care 2003).

Health outreach activities usually involve vaccination. A study by [25] finds that a significantly larger proportion of children in villages where health extension workers were deployed were vaccinated against diphtheria, polio, and tetanus (DPT); measles; polio; tuberculosis; and main antigens. A study by the Center for National Health Services indicates that more than 96 per-cent of health posts in the three largest regions of the country provide immunization services. In Ethiopia, there was an average annual increase in the number of fully immunized children of 15 percent since 2006 (FMOH 2010a). A household survey in the four largest regions finds that 64 percent of children received Penta 3 and 68 percent of children 12–23 months had been vaccinated against measles, one of the indicators in the Millennium Development Goals (MDGs) (The Last Ten Kilometers Project 2009).

Outreach services also involve distribution of equipment, basic drugs and supplies. These resources enable the health outreach officers to deliver promote, preventive and selected curative services that fall under their duties and responsibilities [12]. Reference [26] UNICEF has been procuring and distributing the health post kits. It contracted out the distribution of the kits to population service International (PSI). Trained staff from the health centres accompanies the distributors and show the outreach workers how to assemble and use the equipment. The health system is often characterized by weak infrastructure, poor supply chain management, inadequacy of essential drugs and shortage of human resources [12]. The proportion of children and women using bed-nets treated with insecticide for protection against malaria is significantly increasing especially through the outreach programmes [27].

Moi Teaching and Referral Hospital has grown tremendously over the last 90 years from a Native Cottage hospital to a National Hospital. It was started in 1917 as a cottage hospital that had a bed capacity of 60 to cater for the African health needs. Currently the hospital boasts of a bed capacity of over 800. It is the second National Referral Hospital in Kenya after Kenyatta National Hospital (KNH). The Hospital is located along Nandi Road in Eldoret town (310 kilometers Northwest of Nairobi the capital city of Kenya), Uasin Gishu County, in the North Rift region of Western Kenya. The MTRH serves a total population of 16.24 million people mainly drawn from the following regions; Nyanza (5.39 million), North Rift (5.50 million) and Western Province (5.35 million). The hospital has initiated several outreach programmes in the neighboring counties. The study investigated the influence of health outreach programmes on maternal child health in Moi Teaching and Referral Hospital outreach programmes in Nandi Central Sub-county.

1.1 Statement of the problem

Creation of effective and equitable health system is a basic requirement to achieve better health outcomes in the current society. Health outreach programs have brought positive achievements and transformed the society since its inception. The outreach programmes aim to better among others, the Maternal Child Health. For some reasons, most mothers and children do not access the quality health care in their locality. KDHS 2008-2009 reports show that only 44.0% of births are attended to by health professionals and only 43.0% of deliveries take place in health facilities despite the fact that maternal healthcare services utilization is essential for the enhancement of Maternal Child Health. Due to lack of alternatives, more than 90% of households travel on foot, even when the facility is more than 10 km away [28]. Also according to KDHS 2014 362 maternal deaths per 100,000 live births for the seven-year period preceding the survey; however, this is not statistically different from the ratios reported in the 2003 and 2008-09 KDHS surveys and does not indicate any decline over time. The report also shows that child mortality is higher in rural areas.

There exists a problem in the implementation of outreach programmes. Reference [29] claimed that one-time training sessions are not as effective as five-day training sessions in improving conversation skills. It is generally recommended that training be shaped by a needs assessment and that its duration be determined by the intervention's objectives and by the level of knowledge and skill required for effective implementation [29]. Some authors recommend intervals for booster training varied from weekly sessions to a six-day advanced training course and a three-day refresher training midway in the project [30]. There is no clear formula on how

to carry out health education. This has precipitated to ignorance among the patients. The women's knowledge was extremely low (16%) and equally very few women were offered an opportunity to give an opinion regarding their care by the doctors and nurses in the maternity unit (Irish Society for Quality & Safety in Health care 2003).

Another challenge emanates from the fact that, health system is often characterized by weak infrastructure and inadequacy of essential drugs and shortage of human resources [12]. Lack of regular or adequate funding is a commonly cited reason for failure to implement outreach activities as [31] found that operational costs for outreach consistently underfunded or not funded at all.

Several studies [32;33], all showed the intervention of outreach programmes were very significant in health promotion. Nevertheless, there are studies that show that health outreaches are not very significant in ensuring effective health. There seems to be an inconsistency on the influence of health outreach programmes on maternal health, hence necessitating the current study.

1.2 Objective of the study

The purpose of this study was to determine influence of Moi Teaching and Referral Hospital health outreach programme on maternal child health in Nandi Central Sub-County.

1.3 Secondary information

Community health workers function as intermediaries between community and institutional health care services (Kahn, 2008). According to Hostetter and Klein (2015), CHWs promote and support maternal and child health by Providing referrals and connecting women and families with local health and human services, child care, and prenatal and postnatal care providers and developing rapports with and acting as liaisons between families and healthcare providers.

WHO (2007) indicates that CHWs possess indispensable knowledge about the challenges faced by patients who seek healthcare. Since they make daily rounds to the homes of the patients and accompany patients to the clinics, community health workers understand first-hand the unique needs of the local patients. They also see the effects of illness and poverty in their community. Their insights are important for shaping healthcare policies and healthcare delivery methodologies. Partners in Health (2011) observed that with the low number of health professionals, CHWs provide both basic treatment and by referrals community members who would otherwise be unable to access care. Their ability to reach vulnerable patients in their homes means that patient health need not depend entirely on their ability to make frequent clinic visits and travel long distances in search of medical attention.

Health workers improve access to care by linking affected communities and the clinics that serve them and by alerting medical staff to ill patients, to families with special needs, and to community concerns (Partners in health, 2011). They liaise between medical professionals and the public (Partners in Health, 2011). The community health workers fill many important roles. Mainly they are the glue between their organization and

the community. They provide a bridge between the professionals and clients and are able to communicate with both. Research evidence shows that community health workers improve access to care and health outcomes for vulnerable groups. According to the (2015), CHWs are culturally competent liaisons between health care providers and members of diverse communities. The report underscored CHWs' effectiveness with promoting primary and follow-up care for a wide range of healthcare concerns, including asthma, maternal and child health and immunizations, and diabetes.

Massachusetts Department of Public Health's (MDPH) (2015) report found that CHWs help contain costs by preventing unnecessary urgent and emergency room visits and hospitalizations. The report went on to note that CHWs also improve quality of care and health outcomes by improving patients' access to and use of preventive services, chronic disease self-management support, maternal-child home visiting, and perinatal support.

Rahman, Yunus, Shah, Jhohura, Mistry, Quayyum, Aktar and Afsana (2016) evaluated the impact of the Improving Maternal, Neonatal, and Child Survival (IMNCS) project, which is being implemented by BRAC in rural communities in Bangladesh. Quasi-experimental study design (compared before and-after) was undertaken. The study established that referral case to the health centers due to these complications boosted significantly in intervention group than comparison group (2.3%, $p<0.01$ and 6.6%, $p<0.001$ respectively). They also found out that medically trained health care provider assisted community based public health intervention could increase number of antenatal and postnatal visit, thereby could decrease pregnancy associated complications.

In a research study conducted in several countries, Haver, Brieger, Zoungrana, Ansari and Kagoma (2015) viewed programs in Rwanda, Afghanistan, Nigeria, and Nepal where tasks in delivery of health promotion information and distribution of commodities were transitioned to CHWs to reach underserved populations. They found out that Mothers could take an active role in the delivery of community-based primary healthcare interventions linked to the health facility, as posited by Alma Alta. As illustrated by four Jhpiego – led programs, CHWs have demonstrated that they can effectively deliver Maternal Newborn Health(MNH) and family planning information and distribute commodities that were once regarded as functions of formally trained health workers.

Kayemba, Guwatudde, Waiswa, Kiguli, Namazzi, Namutumba, Tomson and Peterson (2013) sought to determine community health workers' competence in identifying and referring sick newborns in Uganda. Case-vignettes, observations of role-plays and interviews were employed to collect data using checklists and semi-structured questionnaires, from 57 trained CHWs participating in a community health facility linked cluster randomised trial. The study found out that CHWs trained for a short period but effectively supervised are competent in identifying and referring sick newborns in a poor resource setting.

Okuga, Kemigisa, Namutamba, Namazzi and Waiswa (2015) study examined the perceptions of community members and experiences of CHWs around promoting maternal and newborn care practices, and the self-identified factors that influence the performance of health workers to inform future study design and programme implementation. Data were collected using in-depth interviews with six local council leaders, ten health workers

/ CHW supervisors, and eight mothers. The researchers established that there was a continued role for health workers in improving maternal and newborn care and linking families with health services.

Mwanaisha (2015) investigated role of community health workers in enhancing maternal health care program in Mombasa County, Kenya. The study used a descriptive survey research design. The population for the study included 550 households and 50 community health workers in Tudor Moroto, Mombasa County. The results of the study showed that Mothers played a significant role ($p<0.05$) in enhancing maternal healthcare in Tudor Moroto community unit. However, only 50% of the population received Mothers services on MHC. The study found out that MHC educational materials, materials, drugs, health facilities and FP supplies were inadequate according to women studied.

1.4 Methodology

The study adopted descriptive survey design. Survey research provided a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2009). A survey uses questionnaires and interview guides for data collection, with the intent of generalizing from a sample to a population. It also attempts to explain events as they are, as they were. The study targeted 295 respondents, this comprised of the 290 women registered in three health centres and five MTRH health officers. Table 3.1 shows the target population for the study.

Table 3.1: Target Population

	Health Officers	Women
Mother Franciscan Mission Health Centre	1	83
Kilibwoni Health Centre	2	93
Chepterit Mission Health Centre (Kosirai)	2	114
Total	5	290

Source: MTRH (2017)

After, determining the sample size, sampling procedure followed. Sampling is a procedure that allowed the researcher to reach populations that are difficult to sample when using other sampling methods (Goodman, 2010). Cooper and Schindler (2003) define sampling as choosing a given number of subjects from a distinct population as representative of that population.

This is supported by Orodho (2009) who asserted that a sample should be selected in such a way that you are assured that certain sub-groups in the population are represented in the sample in proportion to their numbers. According to Cooper and Schindler (2003) a sampling frame contains all elements from which the sample is drawn and directly linked to the population.

Table 3.4: Sample size

		Target	Sample
Mother Franciscan Mission Health Centre	1	83	47
Kilibwoni Health Centre	2	93	53
Chepterit Mission Health Centre (Kosirai)	2	114	65
Total	5	290	165

The study employed stratified random sampling and purposive sampling techniques in selecting respondents to participate in the study. Stratified random sampling techniques were used to select mothers from the three health facilities in the sub county. Purposive sampling method was used to select MTRH officers. According to Patton (2002), purposeful sampling seeks information rich and illuminative cases that can be examined in-depth. Since purposeful sampling was used to find prospective participants with specific characteristics, it was ideal for this study. For women, stratified random sampling technique was used to select them. At first, the mothers were categorised into; three health centres. Thereafter, simple random sampling was applied using lottery method to select who attended clinics in their registered health centres during the data collection period. The register together with their contacts was used to obtain the random sample. This involved writing the names and numbers of mothers in each category of centre in a sheet of paper, folded, thoroughly mixed and picked at random until a sample of 165 Mothers was achieved.

1.5 Results

The average response rate for the research instrument was 76.3% that is high compared to what Kaufman and Kaufman (2005) indicated that an instrument return rate of more than three quarters is acceptable in scientific studies. Women response rate was higher 92.7% compared to MTRH officers who were interviewed and their response rate stood at 60.0%.

The study sort to investigate how provision of preventive services influenced maternal child health through MTRH outreach programmes in Nandi Central Sub County. Therefore, Mothers were asked to indicate the degree to which preventive services were provided to women in the study area by using the following scale: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). The results are given in Table 4.9.

Research results show that majority 124 (81.0%) of women respondents strongly agreed that their children are provided with immunisation services to keep them away from disease. This shows that mothers strongly agreed that children were always (M=4.65 and SD=0.79) provided with immunisation services to prevent them from contracting diseases such as polio, measles, pneumonia, tuberculosis among others. This shows that immunisation services were regularly provided to children under the age of 5 in Nandi Central Sub County.

Secondly, 100 (65.4%) of respondents strongly agreed that they received PMTCT services to guard their unborn

children from contracting diseases like HIV/AIDS. The descriptive statistics suggests that women agreed (M=4.38 and SD=0.98) that MTRH outreach programmes promoted them to go for PMTCT services in order to prevent unborn child from contracting diseases that their mother suffers. For instance, those pregnant women who are infected by HIV/AIDS are advised to go for PMTCT services to ensure that their children once born are free from aids and they would not breastfeed from their mother milk. The use of PMTCT services has been hailed as one of the government of Kenya significant milestones in preventing the spread of HIV/AIDS to infants.

Table 4.1: Preventive services influence on maternal and child health

Preventive services	**SD**	**D**	**UN**	**A**	**SA**	Mean	Std. Dev
Children are provided with immunisation services to prevent disease contraction	2 (1.3%)	1 (0.7%)	16 (10.5%)	10 (6.5%)	124 (81.0%)	4.6536	.79737
PMTCT services are provided to women to prevent unborn children from contracting HIV/AIDS	2 (1.3%)	8 (5.2%)	19 (12.4%)	24 (15.7%)	100 (65.4%)	4.3856	.98090
We are given advice on maternal emergencies	4 (2.6%)	5 (3.3%)	19 (12.4%)	66 (43.1%)	59 (38.6%)	4.1176	.93148
We have universal access to family planning	9 (5.9%)	41 (26.8%)	17 (11.1%)	16 (10.5%)	70 (45.8%)	3.6340	1.43156
There is emergency preparedness and complication readiness	22 (14.4%)	33 (21.6%)	31 (20.3%)	44 (28.8%)	23 (15.0%)	3.0850	1.29751
We are provided community based distribution of contraceptives (pills, condoms) to manage our family	24 (15.7%)	46 (30.1%)	51 (33.3%)	8 (5.2%)	24 (15.7%)	2.7516	1.24753
Home deliveries are facilitated by CHWs and who also respond to obstetric emergencies	71 (46.4%)	42 (27.5%)	16 (10.5%)	6 (3.9%)	18 (11.8%)	2.0719	1.33823
Valid N (Listwise)						3.2325	0.95519

As a preventive measure, 66 (43.1%) agreed and 59 (38.6%) strongly agreed that they are given advice on maternal emergencies. This shows that mothers are frequently (M=4.11 and SD=0.93) provided with advice on maternal emergencies in Nandi Central Sub County. This shows that women are regularly advised on maternal

emergencies and how to manage them. Fourthly, 70 (45.8%) strongly agreed that they regularly received universal access to family planning while 41 (26.8%) disagreed. The mean results however shows that family planning services were often (M=3.63 and SD=1.43) provided to mothers in the study area.

However, research results further showed that 44 (28.8%) of respondents agreed that there is emergency preparedness and complication readiness, 33 (21.6%) disagreed and 31 (20.3%) were undecided on the statement. this shows that most respondents were undecided (M=3.08 and SD=1.29) as confirmed by these statistics. This shows a significant number of women indicated that they sometimes (had emergency preparedness and complication readiness. This is because most of CHWs who are normally used during these outreach programmes do not have the skills to deal with emergency but can provide directions on best methods of managing emergencies by patients.

Results also showed that 51 (33.3%) of respondents were undecided on the issue that they were provided with distribution contraceptive pills for family planning, 46 (30.15) disagreed and 24 (15.7%) strongly disagreed. The descriptive statistics results suggests that contraceptives were sometimes M=2.75 and SD=1.24) provided with contraceptives to manage their families. This shows that as contraceptives are used in family planning, CHWs do not always go with them to the women in the villages. These contraceptives are mainly found in health facilities and pharmacies.

Lastly, 71 (46.4%) strongly disagreed and 42 (27.5%) disagreed that home deliveries are facilitated by CHWs and who in some situations respond to obstetric emergencies. This implies that respondents disagreed with the statement (M=2.07 and SD=1.33) and shows that CHWs who work under MTRH outreach programme rarely facilitate home deliveries and respond to obstetric emergencies. This implies that not all CHWs can actually attend to pregnant women who are on their due date. They mainly rely on traditional birth attendants (TBAs). On average, statistics show that preventive services were sometimes provided (M=3.23 and SD=0.95) to women in Nandi Central Sub County by CHWs who are facilitated through MTRH outreach programmes. Similarly Gilmore and McAuliffe (2013) found moderate evidence that community health workers were effective in delivering preventive interventions for maternal and child health in low- and middle-income countries.

2. Conclusions

Preventive services are recommended to pregnant women and mothers in order to protect them and their children from disease attack. Preventive services are usually provided in all private and public health facilities. Research findings in this fourth objective showed that preventive services were sometimes (M=3.23 and SD=0.95) provided to women in order to improve child maternal health in Nandi Central Sub County. The preventive services regularly provided by included; immunisation services, PMTCT services, advice on maternal emergencies and universal access family planning. Furthermore, emergency preparedness, complication preparedness and community distribution of contraceptive were occasionally provided to women in the study area. Facilitation of home deliveries and responding to obstetric emergencies were rarely provided through MTRH outreach programmes in the study area. Preventive services are recommended to pregnant women and mothers in order to protect them and their children from disease attack. Preventive services are

usually provided in all private and public health facilities. Research findings in this fourth objective showed that preventive services were sometimes (M=3.23 and SD=0.95) provided to women in order to improve child maternal health in Nandi Central Sub County. The preventive services regularly provided by included; immunisation services, PMTCT services, advice on maternal emergencies and universal access family planning. Furthermore, emergency preparedness, complication preparedness and community distribution of contraceptive were occasionally provided to women in the study area. Facilitation of home deliveries and responding to obstetric emergencies were rarely provided through MTRH outreach programmes in the study area.

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3. Appendices

Appendix i: questionnaire

Instructions

Please answer the questions freely. The information you provide will be treated with utmost confidentiality and will only be used for academic research purposes by the researcher herself.

Part A: Background Information

1. What is your age bracket?

18- 25 years [ ] 26-30 years [ ] 31-40 years [ ]

Above 40 years [ ]

2. What is your Education Level?

Primary [ ] Secondary [ ] College/ University [ ]

Please specify…….

Indicate the frequency to which you agree or disagree on the provision of preventive services on maternal and child health are provided to you by MTRH outreach programme in this area? Use the following scale: SD-Strongly Disagree, D-Disagree, UN-Undecided, A-Agree and SA-Strongly Agree.

Table 5

Preventive services	SD	D	UN	A	SA
Children are provided with immunisation services to prevent disease contraction					
PMTCT services are provided to women to prevent unborn children from contracting HIV/AIDS					
We are given advice on maternal emergencies					
We have universal access to family planning					
There is emergency preparedness and complication readiness					
We are provided community based distribution of contraceptives (pills, condoms) to manage our family					
Home deliveries are facilitated by CHWs and who also respond to obstetric emergencies					

The end

Thank you for taking your time to answer this questionnaire.